20

WHAT IS CLAIMED IS:

- An image forming apparatus having image forming means for forming an image on the basis of input image information, comprising:
- a plurality of appending means for appending predetermined additional information to the input image information respectively by different methods;

density characteristic acquisition means for acquiring density characteristics of an image formed by the image forming means; and

selection means for selecting one of said plurality of appending means on the basis of the acquired density characteristics.

- 2. The apparatus according to claim 1, wherein said density characteristic acquisition means acquires the density characteristics by detecting a density of an image formed by the image forming means.
 - 3. The apparatus according to claim 1, further comprising instruction input means for inputting a user's instruction, and

wherein said density characteristic acquisition means acquires the density characteristics on the basis of a density value set by the user's instruction.

The apparatus according to claim 1, further
 comprising instruction input means for inputting a user's instruction, and

1.0

20

wherein said density characteristic acquisition means comprises:

 $\label{eq:continuous} \mbox{first acquisition means for acquiring the density} \\ \mbox{characteristics by detecting a density of an image}$

5 formed by the image forming means; and

second acquisition means for acquiring the density characteristics on the basis of a density value set by the user's instruction.

- 5. The apparatus according to claim 1, wherein said plurality of appending means append a predetermined pattern indicating the predetermined additional information to the image information respectively by different methods.
- 6. The apparatus according to claim 1, wherein said 15 plurality of appending means differ a pattern indicating the predetermined additional information, and append different patterns to the image information.
 - 7. The apparatus according to claim 6, further comprising a plurality of pattern generation means for generating different patterns indicating the predetermined information, and

wherein said selection means selects one of said plurality of pattern generation means on the basis of the density characteristics.

25 8. The apparatus according to claim 1, wherein said plurality of appending means include: first appending means for appending a predetermined pattern indicating the predetermined additional information; and

second appending means for appending a pattern obtained by changing values of pixels that form the predetermined pattern.

 The apparatus according to claim 1, wherein said plurality of appending means include:

first appending means for appending a

10 predetermined pattern indicating the predetermined
additional information; and

second appending means for appending a pattern obtained by changing a size of the predetermined pattern.

15 10. The apparatus according to claim 1, wherein said plurality of appending means include:

first appending means for appending a predetermined pattern indicating the predetermined additional information: and

- 20 second appending means for appending a pattern obtained by changing a shape of the predetermined pattern.
 - 11. The apparatus according to claim 1, wherein said plurality of appending means include:
- 25 first appending means for appending the predetermined additional information to a predetermined color component of the image information; and

1.0

second appending means for appending the predetermined additional information to a color component different from the predetermined color component of the image information.

5 12. The apparatus according to claim 1, wherein said plurality of appending means include:

first appending means for appending a predetermined pattern indicating the predetermined additional information to the image information at a predetermined period; and

second appending means for appending the predetermined pattern to the image information at a period different from the predetermined period.

13. A method of controlling an image forming 15 apparatus for forming an image on the basis of input image information, comprising:

the density characteristic acquisition step of acquiring density characteristics of an image formed by the image forming apparatus;

20 the determination step of determining an appending method of predetermined additional information to the input image information on the basis of the acquired density characteristics; and

the appending step of appending the predetermined 25 additional information to the input image information by the determined appending method.

- 14. The method according to claim 13, wherein the determination step includes the step of selecting one of a plurality of appending methods on the basis of the density characteristics.
- 5 15. The method according to claim 13, wherein the density characteristic acquisition step includes the step of acquiring the density characteristics by detecting a density of an image formed by the image forming apparatus.
- 10 16. The method according to claim 13, wherein the density characteristic acquisition step includes the step of acquiring the density characteristics on the basis of a density value set by a user.
- 17. A program for controlling an image forming 15 apparatus having image forming means for forming an image on the basis of input image information, said program comprising at least:

codes of a plurality of appending processes for appending predetermined additional information to the input image information respectively by different methods:

a code of a density characteristic acquisition process for acquiring density characteristics of an image formed by the image forming means; and

25 a code of a selection process for selecting one of the plurality of appending processes on the basis of the acquired density characteristics. 18. A recording medium that records a program cited in claim 17.